(19) Europäisches Patentamt
European Patent Office
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(11) **EP 2 492 407 B1**

(12) **EUROPEAN PATENT SPECIFICATION**

(45) Date of publication and mention of the grant of the patent:
16.10.2013 Bulletin 2013/42

(51) Int Cl.:
E03D 11/14 *(2006.01)* ***E03F 5/04*** *(2006.01)*

(21) Application number: **12000972.5**

(22) Date of filing: **15.02.2012**

(54) **Drainage channel**

Ablaufrinne

Rigole d'écoulement

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

(30) Priority: **15.02.2011 ES 201130156 U**

(43) Date of publication of application:
29.08.2012 Bulletin 2012/35

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EP 2 492 407 B1

Printed by Jouve, 75001 PARIS (FR)

Description

[0001] The present invention relates to a water outlet unit for drainage chutes. Its field of application is that of drainage devices in general, and especially that of constructed shower bases.

Background of the invention

[0002] The water outlet in drainage chutes is normally done via a grille or perforated plate fitted tightly on a suitable frame. The array of holes for the passage of water and their small dimension lead to frequent blockages due to the accumulation of dirt, hair, etc, which makes it necessary to carry out constant cleaning if it is wished to maintain a proper functioning and an acceptable appearance.

[0003] WO 2004/072392 discloses a street grid for surface drainage in which the frame of the grid shows inlet openings in the form of depressions to solve residual puddles of water when the upper edge of the frame is higher than the street surface.

[0004] DE 19540068 discloses a drainage grating fixed in an opening in concrete by way of several projecting elastic tabs.

[0005] EP 1191148 discloses a drainage grid mounted on continuous rails with lower and side legs.

[0006] DE 8804073 discloses a drainage channel molded from polyester concrete whose longitudinal upper edges of the side walls are surrounded by a protection profile in the form of a "U"

[0007] DE 202006014959 discloses a drainage glass plate resting on a support in the form of an inverted "U" whore vertical legs receive several "U" shaped spacers. Results in a complex mounting, and it is necessary to add a support.

[0008] Consequently, it is an objective of the present invention to provide a water outlet unit for drainage chutes that is safe and easy to clean.

[0009] Another objective of the present invention is to provide a water outlet unit for drainage chutes that is as simple as possible.

Description of the invention

[0010] In order to achieve the proposed objectives a water outlet unit for drainage chutes has been conceived which presents a perimetric support in order to allow it to rest on the drainage chute and on an interior skirting which terminates in a flange.

[0011] A plate with dimensions smaller than the perimetric support rests on the flanges and is separated from the interior skirting by means of an array of spacers which for these purposes present a vertical wall, a horizontal wall and a rib which permits its attachment to the flange of the interior skirting of the frame, which it clasps.

[0012] In this way, a perimetric separation is configured between the plate and the frame, via which the water circulates. The unit permits a high through-flow thanks to the large perimeter of this type of chute, even with a small separation between the plate and the frame.

[0013] In addition to a high rate of flow, the invention also offers a device that is clean and safe, and with an installation that is extremely simple and economical.

Brief description of the drawings

[0014] In order to complement the foregoing description, and with the aim of aiding a better understanding of the characteristics of the invention, a detailed description is gong to be made of a preferred embodiment, on the basis of a set of plans accompanying this descriptive specification and in which the following has been represented in an illustrative and non-limiting basis.

Figure 1 shows an exploded perspective view of the inventive water outlet unit.

Figure 2 shows a cross-section of the above unit showing the spacers.

Figure 3 shows a cross-section of the unit of figure 1 showing the passage of water through the plate/frame separation.

[0015] In the above figures, the numerical references correspond to the following parts and elements:

1. Frame.
2. Perimetric support.
3. Interior skirting.
4. Flanges.
5. Plate.
6. Spacers.
7. Vertical wall.
8. Horizontal wall.
9. Rib.
10. Stud.
11. Drill-hole.

Detailed description of a preferred embodiment

[0016] As can be seen in figures 1 and 2, the water outlet unit for drainage chutes of the invention consists of a frame (1) which presents a perimetric support (2) and an interior skirting (3) terminating in flanges (4).

[0017] A plate (5), with dimensions somewhat less than the perimetric support (2) of the frame (1), rests on the flanges (4) and against the interior skirting (3) with the mediation of several spacers (6) which, for these purposes, present a vertical wall (7) and a horizontal wall (8). A rib (9) is provided below the horizontal wall (8) in order to configure a cross-section in "U" which clasps the flange (4), permitting the spacers (6) to be attached to it.

[0018] Optionally, the rib (9) of the spacer (6) can present a stud (10) intended for being introduced into a drill- hole (11) provided in the flange (4), which improves the attachment of the spacer (6) to the frame (1) .

[0019] In this way, and as can be seen in figure 3, the plate (5) becomes separated both from the interior skirting (3) and from its flange (4) permitting water to pass freely. Although it might seem that the separation between the plate (5) and the frame (1) is too narrow to ensure a high flow of water, this is not the case due to the large perimeter of the device. The change of direction that the flow of water can undergo does not introduce any appreciable restriction on the rate.

[0020] There are a series of variants that will be evident to an expert on the subject which, adapting the embodiment of the design and the means of production, respect the essence of the invention. So, advantageously, the plate (5) will be made in toughened glass though it can equally be manufactured in stone, ceramic or another suitable material. Likewise, the frame (1) will advantageously be carried out in folded stainless steel sheet though it can also be done in injected plastic or any other appropriate material.

Claims

1. Water outlet unit for drainage chutes comprising a frame (1) which presents a perimetric support (2) with an interior skirting (3) which terminates in a flange (4), and a plate (5) with dimensions somewhat less than the perimetric support (2) which rests on the flanges (4) and against the interior skirting (3) with the mediation of several spacers (6) which, for these purposes, present a vertical wall (7) and a horizontal wall (8), **characterised in that** the spacers (6) incorporate a rib (9) which, together with the horizontal wall (8) configures a cross-section in "U" which clasps the flange (4).

2. Water outlet unit for drainage chutes according to claim 1, **characterised in that** the rib (9) of the spacer (6) presents a stud (10) intended to be introduced into a drill-hole (11) provided for these purpose in the flange (4).

Patentansprüche

1. Wasserablauf für Entleerungsrinnen, der einen Rahmen (1) umfasst, welcher eine perimetrische Halterung (2) mit einer inneren Einfassung (3) aufweist, der in einem Dichtflansch (4) mündet, sowie eine Platte (5) deren Ausmaße etwas geringer als die der perimetrischen Halterung (2) sind und die auf den Dichtflanschen (4) und gegen die innere Einfassung (3) mittels mehrerer Abstandhalter (6) aufliegt und zu diesem Zweck eine senkrechte Wand (7) und eine waagerechte Wand (8) aufweist, **dadurch gekennzeichnet, dass** die Abstandhalter (6) über eine Verstärkungsrippe (9) verfügen, die zusammen mit der waagerechten Wand (8) einen "U"-förmigen Querschnitt aufweist, der den Flansch (4) umklammert.

2. Wasserablauf für Entleerungsrinnen nach Anspruch 1, **gekennzeichnet dadurch, dass** die Verstärkungsrippe (9) des Abstandhalters (6) einen Gewindestift (10) aufweist, der dafür vorgesehen ist, in eine Bohrung (11) eingeführt zu werden, die sich zu diesem Zweck im Flansch (4) befindet.

Revendications

1. Dispositif d'évacuation d'eau pour canalisation de drainage comprenant un cadre (1) qui présente un support périmétrique (2) avec une socle intérieur (3) qui se termine en une bride (4) et un plateau (5) dont les dimensions sont quelque peu inférieures au support périmétrique (2) qui repose sur les brides (4) et contre le socle intérieur (3) par l'intermédiaire de plusieurs entretoises (6) qui présentent, à ces fins, une paroi verticale (7) et une paroi horizontale (8), **caractérisé par le fait que** les entretoises (6) comprennent une nervure (9) qui forme, avec la paroi horizontale (8) une section transversale en « U » qui serre la bride (4).

2. Dispositif d'évacuation d'eau pour canalisation de drainage conformément à la revendication 1, **caractérisé par le fait que** la nervure (9) de l'entretoise (6) présente un goujon (10) destiné à être introduit dans le trou de perçage (11) prévu à ces fins dans la bride (4).

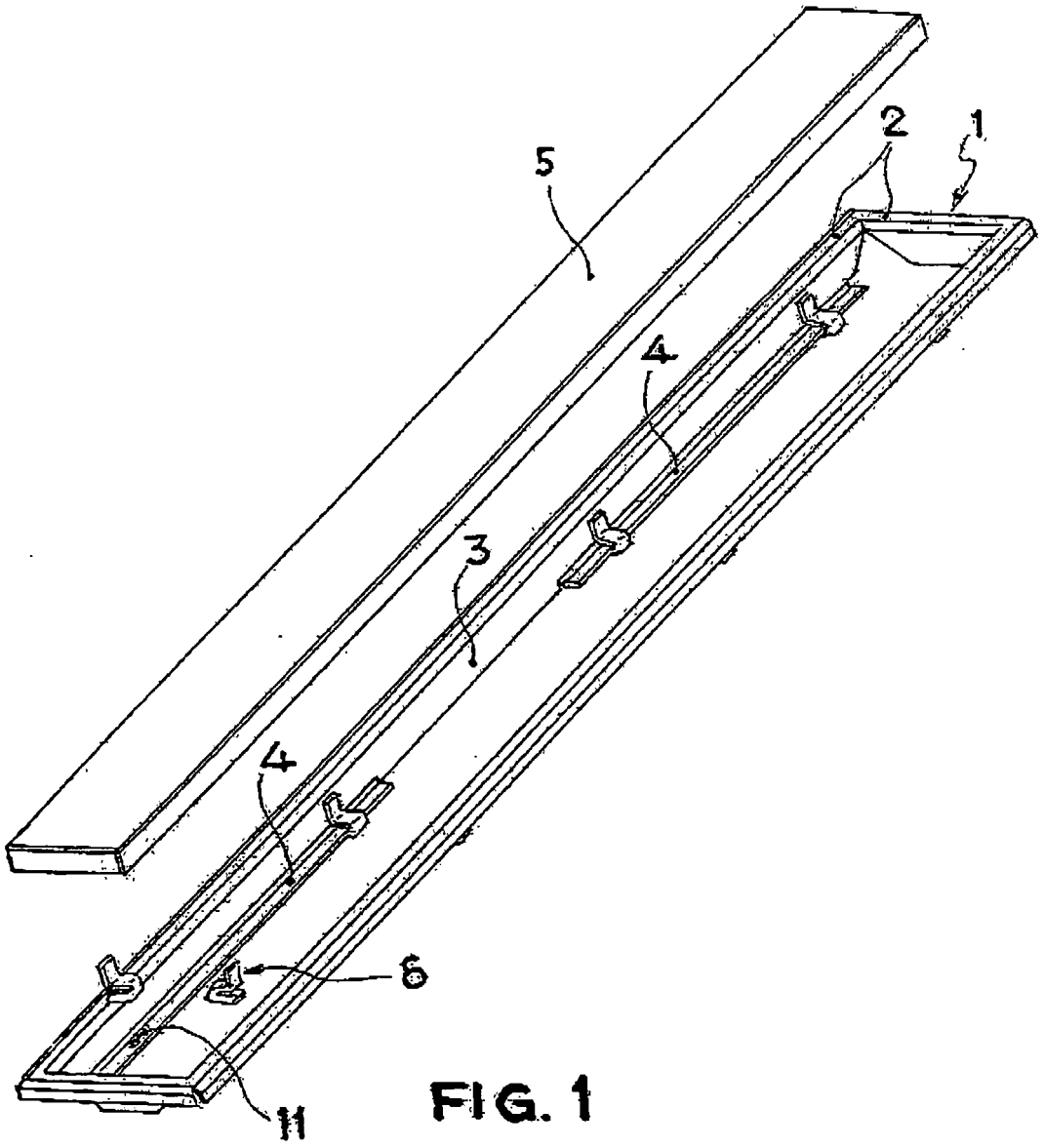

FIG. 1

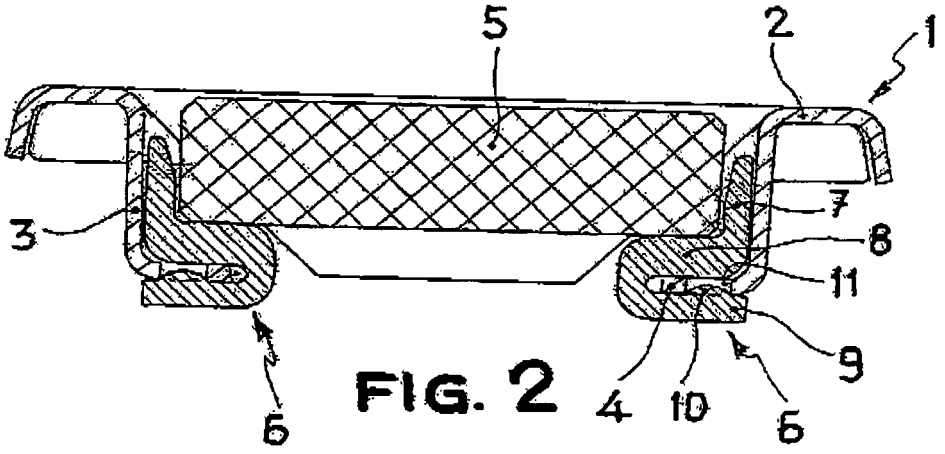

FIG. 2

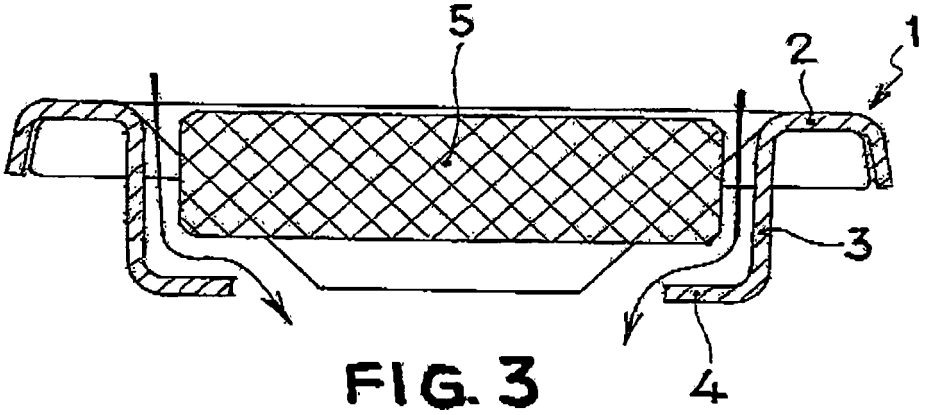

FIG. 3

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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